# NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT BIOGRAPHICAL DATA SHEET

NAME: Alfred "Al" Merrill Worden

ORAL HISTORY: 26 May 2000

## **EDUCATIONAL BACKGROUND:**

Bachelor of Military Science, United States Military Academy, West Point, New York, 1955

M.S. in Astronautical/Aeronautical Engineering and Instrumentation Engineering, University of Michigan, Ann Arbor, Michigan, 1963

Instrument Pilot Instructor School, Randolph Air Force Base, Texas, 1963

Empire Test Pilot School, Farnborough, England, 1965

Aerospace Research Pilots School, Edwards Air Force Base, Edwards, California, 1965

MILITARY EXPERIENCE: Lt. Colonel, United States Air Force (retired- 1975)

# PRE-NASA CAREER:

Pilot and Armament Officer, 95<sup>th</sup> Fighter Inceptor Squadron, Andrews Air Force Base, Maryland (1957-1961)

Instructor, Aerospace Research Pilots School, Edwards Air Force Base, Edwards, California (1965-1966)

## NASA CAREER:

Astronaut, Manned Spacecraft Center/Lyndon B. Johnson Space Center, Houston, Texas (1966-1972)

NASA Ames Research Center, Moffett Field, California

Test Pilot, Airborne Science Office (ASO), Space Science Division (1972-date unknown)

Senior Aerospace Engineer, ASO, Space Science Division (1972-date unknown) Chief, Systems Studies Division (date unknown-1975)

# **POST-NASA CAREER:**

Vice-president, High Flight Foundation, Colorado Springs, Colorado (1975-date unknown)

Director, Energy Management Programs, Northwood Institute, Palm Beach, Florida

President, Alfred M. Worden Inc., Palm Beach, Florida (1978-date unknown)

President, World Endeavor Inc., Palm Beach, Florida

President, World Productions Inc., Palm Beach, Florida

President, MW Aerospace Inc., Vero Beach, Florida (1985-date unknown)

President, Jet Electronics and Technology, B. F. Goodrich Avionics Systems, Grand Rapids, Michigan

Director, Technology Acquisition and Business Development, B. F. Goodrich Aerospace, Brecksville, Ohio

#### **MISSIONS:**

Apollo 15 (AS-510)

- Crew: Commander David R. Scott, Command Module Pilot Alfred M. Worden, Lunar Module Pilot James B. Irwin
- Launched: 26 July 1971 at 09:34:00 A.M. EST from Cape Canaveral, FL
- Duration: 295 hours, 11 minutes, 53 seconds
- Landed: 7 August 1971 at 4:45:53 P.M. EST
- First "J" lunar mission, featuring extended-stay Lunar Module and space suits. First use of lunar roving vehicle. The primary objectives of Apollo 15 were to perform selenological inspection of the Hadley-Apennine region; to survey the region; and to retrieve sample materials from the surface areas surrounding the region. The lunar crew was to activate surface experiments and to evaluate the capability of Apollo equipment, while the Command Module Pilot was to conduct inflight experiments and partake in other photographic tasks.

# **PROFESSIONAL & HONORARY SOCIETIES:**

- Member, American Institute of Aeronautics and Astronautics (AIAA)
- Member, American Astronautical Society
- Member, American Society of Heating, Refrigeration, and Air Conditioning Engineers
- Member, Association of Energy Engineers
- Member, Circumnavigators Club
- Member, Explorers Club
- Member, National Association of Corporate Real Estate Executives
- Member, Royal Astronautical Society
- Member, Society of Experimental Test Pilots
- Member, Sports Car Club of America
- Board Member, Boy's Clubs of America- Salvation Army

# **AWARDS & CITATIONS:**

- Air Force Command Pilot Astronaut Wings
- Arnold Air Society's John F. Kennedy Trophy
- New York Police Department St. George Association's Golden Rule Award
- Air Force Association David C. Schilling Award, 1971
- City of Chicago Gold Medal, 1971
- City of New York Gold Medal, 1971
- Honorary Doctorate of Astronautical Science, University of Michigan, 1971
- Kitty Hawk Memorial Award, Los Angeles Chamber of Commerce, 1971
- NASA Distinguished Service Medal, 1971
- National Aeronautic Association Robert J. Collier Trophy, 1971
- Order of Leopold, Belgium, 1971

- United Nationals Peace Medal, 1971
- American Institute of Aeronautics and Astronautics Haley Astronautics Award, 1972

## **SELECT PUBLICATIONS:**

Worden, Alfred. Hello Earth: Greetings From Endeavor. Los Angeles: Nash, 1974.

Worden, Alfred. A Flight to the Moon. Los Angeles: Nash, 1974.

## **BIOGRAPHICAL REFERENCES:**

Alfred M. Worden Bio [Space Center Homepage], [Online]. (16 April 1999—Last Updated), Available: <a href="http://www.imagine5.com/bios/worden.html">http://www.imagine5.com/bios/worden.html</a> [16 June 1999—Accessed].

Hello Earth by Alfred M. Worden [Space Center Homepage], [Online]. (17 April 1999—Last Updated), Available: http://www.imagine5.com/TheShop/HelloEarth/index.html [16 June 1999—Accesssed].

Michael Cassutt, Who's Who in Space: The International Space Year Edition (New York: MacMillian Publishing Company, 1993), 135-136.

NASA Biographical Data Sheet (July1966), Alfred M. Worden Biographical File, History Collection, Scientific and Technical Information Center, Lyndon B. Johnson Space Center, Houston TX.

NASA Biographical Data Sheet (August 1971), Alfred M. Worden Biographical File, History Collection, Scientific and Technical Information Center, Lyndon B. Johnson Space Center, Houston TX.

NASA Historical Office, <u>Astronautics and Aeronautics</u>, <u>1972</u>: <u>Chronology on Science, Technology, and Policy</u> (Washington, DC: NASA, 1974), 303.

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